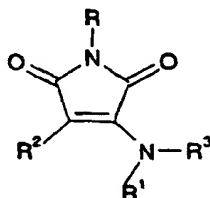




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(75) Inventors/Applicants (for US only): COGHLAN, Matthew, Paul [GB/GB]; SmithKline Beecham Pharmaceuticals, New Frontiers Science Park South, Third Avenue, Harlow, Essex CM19 5AW (GB); FENWICK, Ashley, Edward [GB/GB]; SmithKline Beecham Pharmaceuticals, New Frontiers Science Park South, Third Avenue, Harlow, Essex CM19 5AW (GB); HAIGH, David [GB/GB]; SmithKline Beecham Pharmaceuticals, New Frontiers Science Park South, Third Avenue, Harlow, Essex CM19 5AW (GB); HOLDER, Julie,			
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		(74) Agent: RUTTER, Keith; SmithKline Beecham, Two New Horizons Court, Brentford, Middlesex TW8 9EP (GB).	
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(54) Title: PYRROLE-2,5-DIONES AS GSK-3 INHIBITORS



(I)

(57) Abstract

A method for the treatment of conditions associated with a need for inhibition of GSK-3, such as diabetes, dementias such as Alzheimer's disease and manic depression which method comprises the administration of a pharmaceutically effective, non-toxic amount of a compound of formula (I) or a pharmaceutically acceptable derivative thereof, wherein: R is hydrogen, alkyl, aryl, or aralkyl; R¹ is hydrogen, alkyl, aralkyl, hydroxyalkyl or alkoxyalkyl; R² is substituted or unsubstituted aryl or substituted or unsubstituted heterocyclyl; R³ is hydrogen, substituted or unsubstituted alkyl, cycloalkyl, alkoxyalkyl, substituted or unsubstituted aryl, substituted or unsubstituted heterocyclyl or aralkyl wherein the aryl moiety is substituted or unsubstituted; or, R¹ and R³ together with the nitrogen to which they are attached form a single or fused, optionally substituted, saturated or unsaturated heterocyclic ring; to a human or non-human mammal in need thereof.

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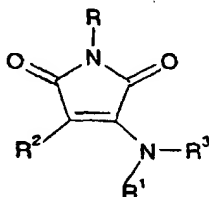
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(54) Title: NOVEL METHOD AND COMPOUNDS



(I)

(57) Abstract

A method for the treatment of conditions associated with a need for inhibition of GSK-3, such as diabetes, dementias such as Alzheimer's disease and manic depression which method comprises the administration of a pharmaceutically effective, non-toxic amount of a compound of formula (I) or a pharmaceutically acceptable derivative thereof, wherein: R is hydrogen, alkyl, aryl, or aralkyl; R¹ is hydrogen, alkyl, aralkyl, hydroxyalkyl or alkoxyalkyl; R² is substituted or unsubstituted aryl or substituted or unsubstituted heterocyclyl; R³ is hydrogen, substituted or unsubstituted alkyl, cycloalkyl, alkoxyalkyl, substituted or unsubstituted aryl, substituted or unsubstituted heterocyclyl or aralkyl wherein the aryl moiety is substituted or unsubstituted; or, R¹ and R³ together with the nitrogen to which they are attached form a single or fused, optionally substituted, saturated or unsaturated heterocyclic ring; to a human or non-human mammal in need thereof.

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